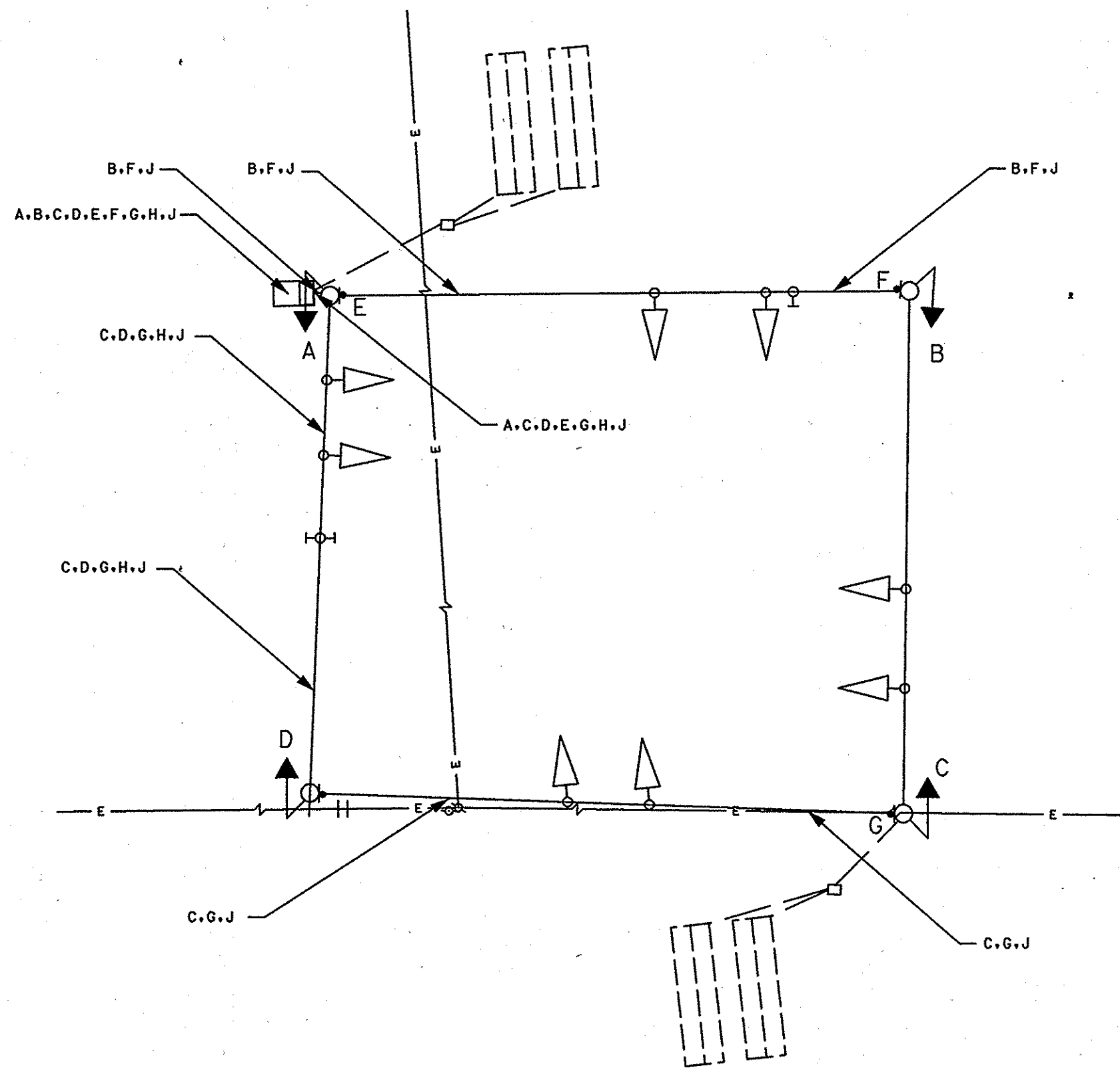


WIRING DIAGRAM



WIRING KEY

- A B C D } 5 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
E F G H } 2 CONDUCTOR ELECTRICAL CABLE (NO. 14 AWG)
J } STRANDED BARE COPPER GROUND WIRE (#6 AWG)

PHASING SEQUENCE CHART

1	2	3	4	5	6	7	8	9	10	11	12
R	R	R	R	R	R	R	R	Y	Y	Y	Y
Y	Y	Y	Y	Y	Y	Y	Y	G	G	G	G
G	G	G	G	G	G	G	G				

PHASE 2 AND 6	G	G	G	G	R	R	R	R	DW	DW	DW	DW	
2 AND 6 CHANGE	Y	Y	Y	Y	R	R	R	R	DW	DW	DW	DW	
PHASE 4 AND 8	R	R	R	R	G	G	G	G	DW	DW	DW	DW	
4 AND 8 CHANGE	R	R	R	R	Y	Y	Y	Y	DW	DW	DW	DW	
PHASE 4 AND 8 ALT	R	R	R	R	G	G	G	G	WALK	WALK	WALK	WALK	
PED CLEARANCE	R	R	R	R	G	G	G	G	FDW	FDW	FDW	FDW	
4 AND 8 ALT CHANGE	R	R	R	R	Y	Y	Y	Y	DW	DW	DW	DW	
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK	

EQUIPMENT LIST "B" CONT'D

ITEM NO.	QUANTITY	DESCRIPTION
8014	4 EA	16" LED COUNTDOWN PEDESTRIAN SIGNAL HEAD
8022	1 EA	REMOVE AND DISPOSE MATERIAL AND EQUIPMENT PER ASSIGNMENT
8038	40 SF	DETECTABLE WARNING SURFACE
8041	130 LF	STRANDED BARE COPPER GROUND WIRE NO. 6 AWG
8054	610 LF	ELECTRICAL CABLE - 2 CONDUCTOR NO.14 AWG
8056	600 LF	ELECTRICAL CABLE - 5 CONDUCTOR NO.14 AWG

EQUIPMENT LIST "A"

EQUIPMENT TO BE SUPPLIED BY THE SHA.

ITEM NO.	QUANTITY	DESCRIPTION
9571	4 SF	SHEET ALUMINUM MAST ARM/POLEMOUNTED SIGNS
	4 EA	R10-3(e) (W/INSTRUCTIONS) (9" X 15")

EQUIPMENT LIST "B"

EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR:

ITEM NO.	QUANTITY	DESCRIPTION
1001	1 EA	MAINTENANCE OF TRAFFIC
5002	338 LF	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS
5004	131 LF	12" HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
5005	65 LF	24" HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
6001	80 LF	DEPRESSED CURB AND GUTTER
6002	1214 SF	4" CONCRETE SIDEWALK
8002	1 EA	2 WIRE CENTRAL CONTROL UNIT
8008	4 EA	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION & SIGN (5"X7" WITH BRAILLE DENOTING CROSSING STREET)

PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE INSTALLATION OF COUNTDOWN PEDESTRIAN SIGNALS (CPS) AND ACCESSIBLE PEDESTRIAN SIGNALS (APS) AT THE INTERSECTION OF MD 320 (PINEY BRANCH ROAD) AT GREENWOOD AVENUE IN MONTGOMERY COUNTY.

MD 320 RUNS IN AN EAST-WEST DIRECTION.

INTERSECTION OPERATION

NORMAL OPERATION

THE INTERSECTION CURRENTLY OPERATES IN A NEMA FOUR PHASE, FULL-TRAFFIC ACTUATED MODE, WITH THE MD 320 APPROACHES RUNNING CONCURRENTLY. THE GREENWOOD AVENUE APPROACHES ALSO RUN CONCURRENTLY.

THE EASTBOUND AND WESTBOUND MOVEMENTS ALONG MD 320 HAVE PERMISSIVE LEFT TURN PHASING. THE NORTHBOUND AND SOUTHBOUND MOVEMENTS ALONG GREENWOOD AVENUE ALSO HAVE PERMISSIVE LEFT TURNS.

PEDESTRIAN OPERATION

NAVIGATOR AUDIBLE PEDESTRIAN PUSHBUTTON MOVEMENTS TO CROSS THE EAST AND WEST LEGS OF THE INTERSECTION ARE TO BE PROVIDED.

WHEN THE PEDESTRIAN LOCATES AND PRESSES THE PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT WILL ANNOUNCE THE FOLLOWING MESSAGE :

EAST: "WAIT TO CROSS PINEY BRANCH RD AT GREENWOOD AVENUE."

WEST: "WAIT TO CROSS PINEY BRANCH ROAD AT GREENWOOD AVENUE."

CONTROLLER INFORMATION

THE EXISTING CONTROLLER AT THE INTERSECTION IS A NEMA EIGHT-PHASE, FULLY ACTUATED CONTROLLER WITH ALL NECESSARY EQUIPMENT HOUSED IN A BASE-MOUNTED CABINET.

SEE GENERAL NOTES ON SHEET FOR INSTRUCTIONS CONCERNING NAVIGATOR CENTRAL CONTROL UNIT.

PROJECT CONTACTS

CONTACT PERSONS FOR DISTRICT 3 ARE AS FOLLOWS:

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MR. WAYNE MOWDY
ASSISTANT DISTRICT ENGINEER
MAINTENANCE - 301-513-7304

MR. AUGIE REBISH
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CONTACTS FOR OFFICE OF TRAFFIC AND SAFETY:

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MONTGOMERY COUNTY TECHNICAL CENTER
301-279-1291

TOD NO:AT910-25
SHA NO:MO579ASD/BSO
MD320@GREENWOOD AVE

SHA

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

MD 320 (PINEY BRANCH ROAD) AT GREENWOOD AVENUE
INSTALLATION OF CPS AND APS

GENERAL INFORMATION SHEET

SCALE NOT TO SCALE DATE 06-06-2007 CONTRACT NO. AT9105185

DESIGNED BY H. DONG COUNTY MONTGOMERY
DRAWN BY W. HENRY LOGMILE
CHECKED BY TIMS NO. 1244
F.A.P. NO. TOD NO.

TS NO. DRAWING TS - 1 OF 1 SHEET NO. 2 OF 2

Edwards
and Kelcey

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PLOTTED: Thursday, December 06, 2007 at 1:40:39 PM
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